low protein diet is cost effective relative to no-treatment in an Italian setting. Further studies should test this model in other countries with different dialysis costs and dietary support.

PUK23

ASSESSING THE LIKELY COST-UTILITY OF ALEMTUZUMAB VERSUS RABBIT ANTI-THYMOCTE GLOBULIN AS INDUCTION THERAPY FOR HIGH-RISK KIDNEY TRANSPLANT RECIPIENTS

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OBJECTIVES: Induction therapy is administered at the time of kidney transplantation to prevent acute rejections. The agent of choice depends on the degree of patient risk for acute rejection. In the US, rabbit anti-thymocyte globulin (rATG) is the standard agent administered to high-risk patients. A monoclonal antibody approved for use in chronic lymphocytic leukemia—alemtuzumab—has been shown in off-label use to be equally safe and efficacious as rATG in these patients. Furthermore, alemtuzumab costs less, making it a potentially cost-effective alternative. Nevertheless, practitioners have been slow to adopt alemtuzumab as an induction agent of choice due to concerns that it may be less effective than rATG in improving patient survival in the long-term. The objective of this study is to the project the incremental cost-effectiveness ratio (ICER) of alemtuzumab versus rATG in high-risk patients. **METHODS:** A decision-analytic model was constructed to model costs and outcomes specific to the first 12 months post-transplantation, such as for delayed graft function and acute rejection; long-term (30-year) outcomes were estimated with a Markov model with outcomes measured in life years (LYs) and quality-adjusted life years (QALYs). Clinical probabilities were obtained from randomized controlled trials; preference weights from direct patient measures in previously published literature; and costs from previously published cost-effectiveness studies on kidney transplantation. **RESULTS:** In the base case, alemtuzumab was projected to yield 1.18 LYs and 1.09 QALYs gained when compared with rATG. The estimated ICER of alemtuzumab compared to rATG was $5,368 per QALY. Sensitivity analysis revealed that the ICER was most sensitive to the transition probabilities to graft loss and death. Despite these variations, alemtuzumab was cost-effective across all parameter ranges, with the greatest ICER being $21,133. **CONCLUSIONS:** In kidney transplant patients at high risk of acute rejection, our model suggests that alemtuzumab is likely to be cost-effective, yielding an ICER below often-cited thresholds.

PUK24

COST UTILITY ANALYSIS OF SACRAL NEUROMODULATION VERSUS BOTOX A IN THE TREATMENT OF OVERACTIVE BLADDER IN COLOMBIA

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OBJECTIVES: Cost Utility Analysis of Sacral Neuromodulation (SNM) vs. botulin toxin type A (BoNTA) in Overactive Bladder (OAB) treatment in Colombia. **METHODS:** Through the adaptation of an HTA Consulting economic model and after data transferability analysis, a cost-utility analysis of SNM vs. BoNTA 100UI in the treatment of OAB in Colombia was done. The model was constructed as a Discrete Event Simulation. The effectiveness data of SNM and BoNTA, defined as more than 50% improvement in urinary parameters, was based on studies identified in systematic review Jaros 2013 conducted in Polish settings. Based in systematic search for health-related quality of life data, one health state for treatment success and one for treatment failure were defined, as well as disutility related to treatment. The costs data was obtain from the Colombian Public Reimbursement Tariff Manual and from urologist medical group specialized in OAB treatment, which also reviewed and adjusted the frequency of resources use. A 10 years horizon and a 3% discount rate were used. Deterministic and probabilistic sensitive analyses were done. **RESULTS:** The treatment with SNM obtained 5.67 QALYs vs. 5.38 QALYs obtained with BoNTA with 0.28 incremental QALYs. The total costs were US$27,828 vs. US$28,906, with minus US$1,077 incremental Dollars. Because SNM was more effective and less costly, dominates to BoNTA, meaning that is cost-saving respect to this. 49.1% of the simulations in the Probabilistic Sensitivity analysis were in the NE quadrant, more effective and more costly, and 50.9% in the SE quadrant, more effective and less costly than BoNTA, and 100% under the threshold of 3 Colombian GDP Per Capita. **CONCLUSIONS:** SNM has a higher effectiveness than BoNTA in terms of Quality of Life at a lower cost and compared to BoNTA is a cost-saving therapy for the treatment of OAB in Colombia.

PUK25

COST-UTILITY ANALYSIS OF VERY LOW-PROTEIN DIET, LOW-PROTEIN DIET AND FULL-PROTEIN DIET IN CKD PATIENTS IN CHINA

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OBJECTIVES: The aim of this study was to conduct an economic evaluation to compare utility and costs of very low-protein diet, low-protein diet and full-protein diet in CKD patients in China. **METHODS:** A cost-utility analysis was conducted in a hypothetical population with GFR≤25ml/min/1.73m^2 in 5 years. Based on the literature data, patients' disease progressions with different diets are generated in 5 years. Cost data was collected by medical insurance database and out-patient survey. EQ-5D was used to collect patients' quality of life score. **RESULTS:** In 5 years, patients with full-protein diet had the highest cost of CNY520786.8, followed by patients with low-protein diet (CNY503440.3), and patients with very-low-protein diet (CNY475066.7). Patients with very-low-protein diet had the highest quality-adjusted life-years(4.329),followed by patients with low-protein diet (4.036), and patients with full-protein diet(3.980). **CONCLUSIONS:** The protein-restricted diet can delay the time of dialysis and then reduce patients' burden and improve patients' quality of life. In this way, the very-low-protein diet is the optimal way.

URINARY/KIDNEY DISORDERS – Patient-Reported Outcomes & Patient Preference Studies

PUK26

IDENTIFICATION OF REASONS FOR NON-ADHERENCE AND ELICITATION OF HEALTH-RELATED QUALITY OF LIFE CONCEPTS ASSOCIATED WITH IMMUNOSUPPRESSANT THERAPY IN KIDNEY TRANSPLANT RECIPIENTS

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OBJECTIVES: Adherence to immunosuppressive therapy after kidney transplantation is crucial to avoid graft rejection and optimise long term patient and graft survival. However, patient's adherence is not always optimal. Our aim was to identify reasons for non-adherence and health-related quality of life (HRQoL) dimensions affected by immunosuppressant therapy (IT) after kidney transplantation (KT) including patient preference of once daily over twice daily immunosuppressive regimen. **METHODS:** A literature review on adherence to immunosuppressant therapy (IT) and impact of IT on HRQoL through the EMBASE database was performed. Interviews were conducted with 2 clinical experts to determine key concepts related to KT and immunosuppressants. Thirty-six patients in four focus groups were asked to cite important concepts related to adherence and impact of IT on HRQoL and rate them. Qualitative analysis was conducted to code patient's responses. **RESULTS:** The results showed that non-adherence was mostly unintentional among the participants. The reason for non-adherence included forgetfulness, interference with lifestyle, being asleep at the time the medication should be taken, change in routine and impact of side effects. The twice daily regimen was more problematic in relation to adherence. Overall, participants were of the opinion that a once daily IT regimen would help them be more adherent. Also, IT impacts on the HRQoL of the patient in a number of ways including: restricting the patients' lifestyle, causing anxiety or impairing the patient's ability to work. Although the patients happily oblige to the necessity of taking IT medication, patients preferred to reduce the burden associated with medication. **CONCLUSIONS:** This study suggested that patients strongly valued adherence to IT medication and saw a change in the regimen from twice daily to once daily as one way to improve their adherence to IT. Results also suggested that a once daily regimen could improve patient's HRQoL.

PUK27

UNDERSTANDING MID FOR MICTURITION FREQUENCY, A PIVOTAL ENDPOINT FOR OAB STUDIES

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OBJECTIVES: Although pivotal studies of overactive bladder (OAB) medications routinely use micturition frequency (MF) when defining the primary or coprimary endpoint, few studies have examined minimal important difference (MID) values for this parameter. This study explored MID values for MF using data from a Phase IIb study in OAB patients with urge predominant incontinence along with estimates for OAB symptoms of urinary urgency (UU), urgency incontinence (UUI), and total incontinence (TI). **METHODS:** The endpoint was defined as the change from baseline to 8 weeks in the number of daily episodes averaged over a diary week for each parameter. Anchor- and distribution-based methods using statistical criteria (e.g. half standard deviation) were used to estimate MID ranges for all diary parameters. Anchors were selected as a +1 change score representing slight improvement for global assessment questions assessing frequency and control over OAB symptoms. **RESULTS:** The sample included 769 OAB patients with (80.4%) and without (19.6%) incontinence. The baseline mean number of micturitions was 11 and the mean (%) change from baseline representing the MID for MF ranged from 1.6-1.8 (14.3-16.4%). For urgency, the baseline and mean (%) change was 7 and 2.4-2.5 (42.7-47.2%), respectively. For total incontinence, the baseline and mean (%) change was 3 and 1.5-1.7 (64.3-76.2%), respectively, with similar values for UUI. Distribution-based values were much smaller than those derived using anchor-based methods. **CONCLUSIONS:** The mean changes representing MID estimates for micturition frequency were comparable to those observed for incontinence but constituted smaller percent changes given the larger number of baseline micturitions. The MID estimates for MF were smaller than the MID estimates for urgency. As MID estimates derived for OAB patients have focused mainly on incontinence, these results present useful information for designing studies which routinely include change in micturition frequency as the primary endpoint of interest.

PUK28

A SYSTEMATIC REVIEW OF HEALTH-RELATED QUALITY OF LIFE ASSESSMENT FOR CHILDREN AND ADOLESCENTS WITH CHRONIC KIDNEY DISEASE

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OBJECTIVES: To evaluate health-related quality of life (HRQoL) assessment in children and adolescents with chronic kidney disease (CKD). **METHODS:** A systematic literature search was conducted using PubMed, MEDLINE, PsycINFO, and CINAHL from the inception of each database until October 2013. Search terms included kidney disease, children (or adolescents), health-related quality of life, and instrument. The following inclusion criteria were applied to the studies: (1) published in English, (2) in a peer reviewed journal, (3) about children or adolescents with CKD or end-stage renal disease (ESRD), and (4) had one of the following outcomes—development/validation of a disease-specific HRQoL instrument OR use of HRQoL as a primary outcome. A modified minimum data checklist developed by Efficace and colleagues was used to evaluate the quality of studies that report HRQoL outcomes. The consensus-based standards for the selection of health measurement instruments (COSMIN) was used to evaluate the methodological quality of studies that report on the development or validation of HRQoL instruments. **RESULTS:** A